

EXHIBIT A

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Attorneys for Plaintiff MEDIATEK INC.

**UNITED STATES DISTRICT COURT
 NORTHERN DISTRICT OF CALIFORNIA
 OAKLAND DIVISION**

MEDIATEK INC.

Plaintiff,

v.

FREESCALE SEMICONDUCTOR, INC.

Defendant.

Civil Action No. 4:11-cv-05341 (YGR)

**PLAINTIFF MEDIATEK INC.'S FIRST
 SET OF INTERROGATORIES TO
 DEFENDANT FREESCALE
 SEMICONDUCTOR, INC. (NOS. 1-21)**

Pursuant Rules 26 and 33 of the Federal Rules of Civil Procedure, Plaintiff MediaTek Inc. ("MediaTek") requests that Defendant Freescale Semiconductor, Inc. ("Freescale") answer the following interrogatories in writing under oath within thirty days of service.

INSTRUCTIONS

The following instructions apply to the interrogatories below and should be considered part of each interrogatory.

1. Freescale is requested to provide all responsive information. If Freescale withholds any requested information, Freescale is requested to state the basis for withholding the information in a manner sufficient to enable MediaTek and the Court to adjudicate the validity of its withholding. For any information withheld on the grounds of privilege, work product, or other alleged protection against disclosure, Freescale is instructed to provide at least the following information:

- a. A description of the information withheld;
- b. The identity of all persons with knowledge of the withheld information;
- c. A description of the basis for withholding the information sufficient to permit the Court to evaluate Freescale's basis for withholding it.

2. All interrogatories should be given their broadest reasonable construction, so as to bring within the scope of the interrogatory information that might otherwise be considered beyond its scope. In particular:

- a. The singular form of a word should be interpreted as plural, and the plural form of a word should be interpreted as singular, whenever appropriate in order to bring within the scope of any interrogatory information that might otherwise be considered beyond its scope;
- b. The connectives "and" and "or" should be construed either disjunctively or conjunctively, whichever makes the interrogatory most inclusive; and
- c. The word "any" should be construed to mean each and every.

4. If Freescale objects to any portion of any interrogatory for any reason, Freescale is instructed to respond in full to all portions of the interrogatory to which its objection does not apply.

5. None of the definitions and instructions or the interrogatories set forth below should be construed as an admission relating to the existence of any evidence, to the relevance or admissibility of any evidence, or to the truth or accuracy of any statement or characterization in any definition, instruction, or interrogatory.

6. These interrogatories are ongoing and continuing in nature. To the extent that the answers to any of these interrogatories may at any time be supplemented, changed, or otherwise affected by information acquired by Freescale subsequent to service of its answers, MediaTek directs Freescale to promptly serve supplemental answers reflecting such changes in accordance with Federal Rule of Civil Procedure 26(e).

The following definitions apply to the instructions above and interrogatories set forth below:

1. “Freescaler” and “you” means Freescaler Semiconductor, Inc. and any of its predecessors, successors, present and former partners, investors, corporate parents, affiliated companies or corporations, direct or indirect subsidiaries, officers, directors, employees, agents, attorneys, servants, representatives, and all other persons acting on their behalf.

2. “MediaTek” means MediaTek Inc. and any of its predecessors, successors, present and former partners, investors, corporate parents, affiliated companies or corporations, direct or indirect subsidiaries, officers, directors, employees, agents, attorneys, servants, representatives, and all other persons acting on their behalf.

3. “’845 Patent” means United States Patent No. 6,738,845, entitled “Bus Architecture and Shared Bus Arbitration Method for a Communication Device.”

4. “’331 Patent” means United States Patent No. 6,889,331, entitled “Dynamic Voltage Control Method and Apparatus.”

5. “’753 Patent” means United States Patent No. 6,088,753, entitled “Bus Arrangement for Interconnection of Discrete and/or Integrated Modules in a Digital System and Associated Method.”

6. “’244 Patent” means United States Patent No. 6,311,244, entitled “Priority Allocation in a Bus Interconnected Discrete and/or Integrated Digital Multi-Module System.”

7. “MediaTek Patents-in-Suit,” “Patents-in-Suit,” and “Asserted Patents” means the ’845, ’331, ’753, ’244 Patents.

8. “Freescale Product” means any product, component, system, circuit device, integrated circuit, processor, multimedia application processor, microcontroller, or system-on-chip that has been designed, developed, tested, made, used, demonstrated, imported into the United States, offered for sale, or sold by Freescale.

9. “Freescale Accused Product” and “Freescale Accused Products” mean:

- a. Freescale’s multimedia processor family i.MX31;
- b. Freescale’s multimedia processor family i.MX35;
- c. Freescale’s multimedia processor family i.MX50;
- d. Freescale’s multimedia processor family i.MX51;
- e. Freescale’s multimedia processor family i.MX53;
- f. Freescale’s multimedia processor family MCF521X;
- g. Freescale’s multimedia processor family MCF5225X;
- h. Freescale’s multimedia processor family MPC8358E;
- i. Freescale’s multimedia processor family MPC8360E; and
- j. All Freescale Products that contain, include, or support: (i) a clock signal that operates at multiple frequencies; (ii) a bus architecture that connects

1 at least two processors to memory controllers or devices; and/or (iii) bus
2 arbitration between at least two bus masters and at least two bus slaves.

3 10. The term “bus master” means any component, module, or device connected to a
4 bus that can request read or write access to another component, module, or device connected to
5 the bus.

6 11. The term “bus slave” means any component, module, or device connected to a
7 bus that responds to a read or write request from a bus master.

8 12. The term “Fixed Mode Arbitration” means a bus arbitration mode where a bus
9 master with highest priority wins access to the bus, similar to the bus arbitration mode described
10 in Section 14.6.2.2 of the Freescale document titled “MCF52259 ColdFire® Integrated
11 Microcontroller Reference Manual,” Document Number: MCF52259RM, Rev. 4 3/2011.

12 13. The term “Round-Robin Mode Arbitration” means a bus arbitration mode using a
13 scheme that cycles through a sequence of bus masters, similar to the bus arbitration mode
14 described in Section 14.6.2.1 of the Freescale document titled “MCF52259 ColdFire® Integrated
15 Microcontroller Reference Manual,” Document Number: MCF52259RM, Rev. 4 3/2011.

16 14. The terms “document” and “electronically stored information” have the broadest
17 meaning permitted under Federal Rule of Civil Procedure 34(a).

18 15. The term “communication” has the broadest meaning permitted under the Federal
19 Rules of Civil Procedure, and includes the transmittal of information in the form of facts, ideas,
20 inquiries, or otherwise by any means, including but not limited to any meeting, conversation,
21 discussion, conference, correspondence, message, or other written or oral transmission,
22 exchange, or transfer of information in any form between two or more persons, including but not
23 limited to in person or by telephone, facsimile, telegraph, telex, e-mail or other medium.

24 16. The terms “identify,” “specify,” and “state” have the following meanings:

- 25 a. When applicable to documents or electronically stored information, to
26 provide at least: (i) the name or title of the document or electronically
27 stored information; (ii) the date on which the document or electronically
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1 stored information was prepared; (iii) the name, title, and company
2 affiliation of the person who created the document or electronically stored
3 information; (iv) the name, title, and company affiliation of each person to
4 whom the document, electronically stored information, or thing was
5 disclosed; (v) the type or general nature of the document or electronically
6 stored information (i.e., whether it is a letter, memorandum, minutes of a
7 meeting, database, spreadsheet, etc.); (vi) the present location of the
8 document or electronically stored information; and (vii) the name, title,
9 and company affiliation of each person who maintains custody of the
10 document or electronically stored information;

11 b. When applicable to a communication, to provide at least: (i) the date,
12 time, and place of the communication; (ii) the manner of the
13 communication; (iii) the substance of the communication; (iv) the names
14 of all parties who participated in, read, heard, saw, or otherwise had access
15 to the contents of the communication, whether in its original form or in
16 summary or transcript; and (v) the identity of all documents that
17 memorialize, commemorate, summarize, record, or refer to the
18 communication;

19 c. When applicable to a natural person, to provide at least: (i) the person's
20 full name; (ii) the person's last known residential address and telephone
21 number; (iii) the name of the person's last known employer; (iv) the
22 person's last known business address and telephone number; and (v) the
23 person's last known title or position of employment;

24 d. When applicable to an entity, to provide at least: (i) the full name of the
25 entity; (ii) the last known address and telephone number of its principal
26 place of business; (iii) the type of entity (i.e., whether it is a corporation,
27 partnership, association, etc.); and (iv) the state, commonwealth, territory
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1 of the United States, or other governmental body in which the entity is
2 registered to do business, together with the dates of such registration; and

3 e. When applicable to any other information, to provide sufficient details
4 concerning the characteristics or properties of the requested information so
5 as to enable it to be readily located and distinguished.

6 17. The terms “person” and “party” mean any natural person, corporation,
7 partnership, proprietorship, association, joint venture, governmental or other public entity, or any
8 other form of organization or legal entity.

9 18. “RFP” means any request for proposal, request for quote, request for information,
10 or any other similar request from a potential customer of Freescale soliciting a proposal for
11 purchase or sale of Freescale Products.

12 19. “Gross Unit Sales” means the total units sold of Freescale Products.

13 20. “Net Unit Sales” means the Gross Unit Sales minus any returns.

14 21. “Gross Revenue” means total receipts from the sale or license of Freescale
15 Products.

16 22. “Net Revenue” means Gross Revenue minus any rebates, discounts, allowances,
17 credit returns, pricing errors, or any other reimbursement or adjustment from total receipts.

18 23. “Cost of Goods Sold” means the sum of all costs that vary with the volume of
19 Freescale Products sold or licensed.

20 24. “Gross Profit” means Net Revenue minus Cost of Goods Sold.

21 25. “Net Profit” means Gross Profit minus operating expenses (i.e., selling, general,
22 and administrative expenses).

23 26. “Gross Profit Margin” means the Gross Profit divided by Net Revenue.

24 27. “Net Profit Margin” means the Net Profit divided by Net Revenue.

25 28. The phrase “asserted claims” means the patent claims that MediaTek has
26 identified or later identifies in its disclosures under Patent Local Rule 3-1(a).

INTERROGATORIES**INTERROGATORY NO. 1:**

Separately for each of the MediaTek Patents-in-Suit, identify the date, circumstances, and person or persons through which Freescale first learned of the patent.

INTERROGATORY NO. 2:

Describe in detail all steps that Freescale has taken to avoid infringement of any of the MediaTek Patents-in-Suit, including without limitation all efforts to obtain any opinion-of-counsel with respect to any of the MediaTek Patents-in-Suit and any effort by Freescale to design or redesign a device to avoid infringement of any claim of any of the MediaTek Patents-in-Suit.

INTERROGATORY NO. 3:

Identify, by part number and description, each Freescale Accused Product that has been imported into the United States, exported from the United States, or made, used, sold, or offered for sale in the United States, and for each such product identify the respective date(s) that the product was first made, offered for sale, and sold, both in the United States and abroad.

INTERROGATORY NO. 4:

Separately for each of the Freescale Accused Products, identify all product names, part numbers, model numbers, internal names, and any other designations that have been used formally or informally to identify such product, including designations that were used to identify the product during the course of its design and development.

INTERROGATORY NO. 5:

Separately for each of the Freescale Accused Products, identify the three (3) Freescale employees and the three (3) persons outside Freescale who Freescale believes are most knowledgeable about the design, development, structure, function, and operation of each of the following features and portions of the product, and any features that are similar or related:

- a. Dynamic Voltage/Frequency Scaling (DVFS)
- b. Clock Control Module (CCM)

- c. General Power Controller (GPC)
- d. External Memory Controller (EXTMC), also called the External Memory Interface (EMI) in some products, including the arbitration schemes used
- e. Multi Master Multi Memory Interface (M4IF), including the arbitration schemes used
- f. Multi Layer AHB Crossbar Switch (AHBMAX), including the arbitration schemes used
- g. Internal Bus Arbitration in the System Control Module (SCM)
- h. QUICC Engine Block
- i. ARM platform
- j. AXI, AHB, and IP busses
- k. Image Processing Unit (IPU)
- l. SAHARA security coprocessor, also called SAHARA lite in some products
- m. Smart DMA or SDMA
- n. On-chip bus arbiters

INTERROGATORY NO. 6:

Separately for each of the Freescale Accused Products, identify all documents, including but not limited to source code and circuit schematics, that show the structure, function and/or operation of each of the following features and portions of the product, and any features that are similar or related:

- a. Dynamic Voltage/Frequency Scaling (DVFS)
- b. Clock Control Module (CCM)
- c. General Power Controller (GPC)
- d. External Memory Controller (EXTMC), also called the External Memory Interface (EMI) in some products, including any arbitration schemes used
- e. Multi Master Multi Memory Interface (M4IF), including the arbitration schemes used
- f. Multi Layer AHB Crossbar Switch (AHBMAX), including the arbitration schemes used
- g. Internal Bus Arbitration in the System Control Module (SCM)

- h. QUICC Engine Block
- i. ARM platform
- j. AXI, AHB, and IP busses
- k. Image Processing Unit (IPU)
- l. SAHARA security coprocessor, also called SAHARA lite in some products
- m. Smart DMA or SDMA
- n. On-chip bus arbiters

INTERROGATORY NO. 7:

Separately for each of the Freescale Accused Products, identify the dates and circumstances of the first conception, design, development, engineering, manufacture, operation, and marketing of each such product, the three (3) persons who Freescale believes are most knowledgeable about each of the foregoing activities, and the nature of each such person's involvement.

INTERROGATORY NO. 8:

For each integrated circuit of or contained in any Freescale Accused Product, identify the entity that designed the integrated circuit, the entity that manufactured the integrated circuit, and the entity from whom the integrated circuit was purchased.

INTERROGATORY NO. 9:

Identify any and all Freescale Products that include or support both Fixed Mode Arbitration and Round-Robin Mode Arbitration.

INTERROGATORY NO. 10:

Describe in detail the motivation behind Freescale's decision to design and implement Fixed Mode Arbitration in its products, including identifying any and all actual or potential clients or customers who requested features or functionalities that are embodied in, provided by, or are similar to Fixed Mode Arbitration.

INTERROGATORY NO. 11:

Identify any and all of Freescale's customers who have purchased any Freescale Products

1 that include Fixed Mode Arbitration and identify all customers that Freescale knows or has
2 reason to believe use the Fixed Mode Arbitration.

3 **INTERROGATORY NO. 12:**

4 Separately for each asserted claim of the MediaTek Patents-in-Suit that Freescale
5 contends it has not infringed (directly, indirectly, literally or under the doctrine of equivalents)
6 state in detail all bases for that contention (including without limitation an identification of each
7 of the particular limitations of the asserted claims that Freescale contends is not met by each
8 Freescale Accused Product) and identify all documents (including without limitation source code
9 and circuit schematics) and other evidence that supports that contention.

10 **INTERROGATORY NO. 13:**

11 State in detail all grounds for your contention as set forth in your Third Affirmative
12 Defense that “[s]ome or all of Freescale’s use, if any, of the alleged inventions [of the MediaTek
13 Patents-in-Suit] is licensed,” identify all persons with knowledge concerning the basis for that
14 contention, and identify all documents and other evidence that supports that contention.

15 **INTERROGATORY NO. 14:**

16 Separately for each of the Freescale Accused Products, identify all customers who have
17 purchased the Freescale Accused Product, the volume of the Freescale Accused Product
18 purchased by each customer (in units and revenues) on a quarterly basis since the first sale of the
19 product, and the person(s) most knowledgeable about any such sales to these customers.

20 **INTERROGATORY NO. 15:**

21 Separately for each of the Freescale Accused Products, identify any products or services
22 that are sold in conjunction or connection with any Freescale Accused Product, and identify the
23 person(s) most knowledgeable about any such products or services.

24 **INTERROGATORY NO. 16:**

25 Separately for each of the Freescale Accused Products and any products or services that
26 are sold in conjunction with any Freescale Accused Product, identify on a quarterly and annual
27 basis (inside and outside the United States separately) the Gross Unit Sales, Net Unit Sales,
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1 Gross Revenue, Net Revenue, Cost of Goods Sold, Gross Profit, Net Profit, Gross Profit Margin
2 and Net Profit Margin, and identify the person(s) most knowledgeable about such sales and
3 financial information.

4 **INTERROGATORY NO. 17:**

5 Identify Freescale's contention regarding the proper amount and calculation of a
6 reasonable royalty rate for Freescale's infringement of the MediaTek Patents-in-Suit (assuming
7 that the MediaTek Patents-in-Suit are valid, infringed, and enforceable) and state the basis for
8 such contention.

9 **INTERROGATORY NO. 18:**

10 Identify all analyses, forecasts and projections of sales for each of the Freescale Accused
11 Products, identify the Bates range for each analysis, forecast or projection, and identify the
12 person(s) most knowledgeable about each analysis, forecast or projection.

13 **INTERROGATORY NO. 19:**

14 Separately for each of the Freescale Accused Products, identify all products that compete
15 with, are acceptable substitutes for, or are reasonably interchangeable with such product.

16 **INTERROGATORY NO. 20:**

17 Identify in detail any alternative product, technology, or process that Freescale contends
18 has been or could be used as a commercial alternative to the technology claimed in the MediaTek
19 Patents-in-Suit, and identify the person(s) most knowledgeable about such commercial
20 alternatives.

21 **INTERROGATORY NO. 21:**

22 Separately identify the following:

- 23 (a) All third-party patents and technology that has been practiced by any Freescale
24 Accused Products and any license agreement pursuant to which Freescale has (or
25 has had) the right to practice such patent(s) or technology (including the terms of
26 the agreement, the amount of royalties or other monetary consideration
27 paid/received under the agreement, and the Bates range of the agreement), and the
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1 person(s) most knowledgeable about such third-party patents or technology and
 2 the corresponding agreements;

- 3 (b) All patents owned by Freescale that are practiced by any Freescale Accused
 4 Products and any attempts by Freescale to patent any of the technology
 5 incorporated into any Freescale Accused Products, and the person(s) most
 6 knowledgeable about such patents and the persons most knowledgeable about
 7 such attempts to patent; and
- 8 (c) All licenses granted by Freescale to third parties for any patent(s) or technology
 9 owned by Freescale that are practiced by any Freescale Accused Products
 10 (including the terms of the license, the amount of royalties paid/received under
 11 the license, and the Bates range of the license), and the person(s) most
 12 knowledgeable about such licenses.

13
 14 Dated: April 13, 2012

Respectfully submitted,

MEDIATEK INC.

By its attorneys,



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Attorneys for Plaintiff MEDIATEK INC.

CERTIFICATE OF SERVICE

I, Patricia Shore, hereby certify that a true and correct copy of **PLAINTIFF
MEDIATEK INC.'S FIRST SET OF INTERROGATORIES TO DEFENDANT
FREESCALE SEMICONDUCTOR, INC. (NOS. 1-21)** was served upon the following as
indicated below on this 13th day of April, 2012:

By hand delivery, for delivery on April 13, 2012:

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Attorneys for Defendant
FREESCALE SEMICONDUCTOR, INC.

In addition to the aforementioned service, true and correct courtesy copies of the above
documents were also served via electronic mail on this 13th day of April, 2012: to the following
addresses:

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I certify under penalty of perjury under the laws of the United States that the foregoing is
true and correct to the best of my knowledge and belief.

Dated: April 13, 2012


Patricia G. Shore